

# **Chapter 12.3**

## **Asbestos Control Program**

### **1. Purpose**

The purpose of the ACP is to provide a safe work environment by maintaining potential asbestos exposure hazards as low as reasonably achievable for all building occupants and service personnel. This can be achieved through a well-defined ACP that includes asbestos inspection, hazard assessment, and response actions and by ensuring that all JSC asbestos-related work follows the requirements set forth in the remaining chapters of Part 12. Other important aspects of a comprehensive ACP include employee training (Chapter 12.5), medical surveillance (Chapter 12.5), personal protection (Chapter 12.5), work practices and procedures (Chapters 12.3 through 12.13), air and exposure monitoring (Chapter 12.8), waste disposal (Chapter 12.14), and SOPs (Chapter 12.15 and the attachments in Appendix 12B).

This chapter defines the specific procedures for identifying and assessing ACM, developing appropriate response actions for mitigating its hazard potential, and conducting annual ambient air monitoring.

### **2. Responsibilities**

The APM (JE) has primary responsibility for coordinating the ACP. He or she will use the services and support of both the OHD and facilities maintenance COSS contractor to implement the ACP.

### **3. Objectives**

The primary objectives of the ACP are to:

- a. Identify the locations(s), type(s), and quantity of ACM.
- b. Inspect and periodically re-inspect to determine the physical condition of existing or suspect ACM.
- c. Assess the hazard potential posed by existing or suspect ACM based on a set of standard criteria.
- d. Perform routine annual ambient air sampling.
- e. Develop and implement response actions to abate existing and potential ACM contamination.
- f. Respond to emergencies and fiber release episodes.
- g. Prevent future contamination through minimization of ACM disturbance and damage.

### 4. ACM inspections and hazard assessments

The APM will ensure that periodic inspection and hazard assessment of suspect or confirmed ACM is accomplished in JSC facilities. The hazard assessment process uses the information contained in the inspection report and involves evaluating the degree of hazard potential that exists based on a set of criteria. The inspection or assessment process provides guidance in anticipating response actions; preparing scopes of work, cost estimates, and schedules; and in developing and prioritizing an overall asbestos management plan.

### 5. Bulk sampling

Bulk sampling verifies the presence or absence of asbestos in a particular building or facility material. At JSC, the ACM of primary concern is the SAI or fireproofing on the structural members and decking, but you may also find ACM in a wide variety of other building materials. The following requirements apply:

- a. You shall presume the presence of asbestos in the absence of bulk sample analysis confirmation for all suspect ACM.
- b. Collecting bulk samples of ACM can cause significant damage and fiber release. Therefore, only individuals designated by the APM, who are trained in the proper sampling techniques, will be allowed to collect samples. The APM has designated both the OHD and the COSS environmental support contractor as having trained personnel to perform this sampling. Other contractors shall request this designation from the APM.
- c. Analyze bulk samples by EPA-approved methods listed in 40 CFR 763.
- d. All individuals shall wear respiratory protection while obtaining bulk samples of suspect ACM to prevent inhaling fibers.

### 6. Routine building ambient air sampling

The following air sampling occurs at JSC:

- a. ***Annual ambient air sampling*** – The OHD has been conducting a routine program of annual ambient air sampling at JSC for a number of years. The ambient air sampling has been conducted in buildings known to contain SAI and exposed asbestos acoustic or decorative material.

The data collected from this effort have shown that ***no*** significant quantity of airborne asbestos fibers exists within JSC facilities and that levels are far below EPA and OSHA limits.

- b. All samples obtained during the performance of the annual ambient air sampling are collected and analyzed per the NIOSH Method 7400 or 7402. As you obtain additional sample data, add them to the existing database. Ambient air monitoring will be performed at least annually in each of the 34 buildings (1, 2, 3, 4N, 5, 7A, 8, 9A, 10, 11, 12, 13, 14, 15, 16, 16A, 17, 18, 24, 25, 29, 30A, 30M, 31, 32, 33, 36, 44, 45, 49, 350, 352, 419, and

420) at JSC, all of which are known to contain SAI or exposed asbestos-containing acoustical or decoration materials.

- c. ***Asbestos abatement project air sampling*** – The OHD has primary responsibility for air sampling during asbestos abatement projects and particularly the final clearance air sampling. The abatement contractor or an outside consultant conduct personnel and other air sampling during the performance of a particular project, as required. For additional information about air sampling requirements, refer to Chapter 12.8 of this handbook.

## 7. Response actions

You shall follow these requirements for asbestos response:

- a. The APM (JE) is responsible for all response actions. The EPA has defined “response action” to mean “a method including removal, encapsulation, permanent enclosure, repair, operations and maintenance that protects human health and the environment from friable ACBM” (40 CFR 763).
- b. At JSC, trained workers will perform one of the following four types of responses when notified about damaged ACM or when notified of a minor or major fiber release:
  - 1. ***Cleanup of ACM*** – This response is appropriate when loose ACM dust or debris is encountered. This is a nonemergency, scheduled activity that is normally completed within 48 hours from notification.
  - 2. ***Repair of ACM*** – This response is appropriate whenever ACM is found in a damaged, delaminated, or deteriorated condition over a relatively small area.
  - 3. ***Removal of ACM*** – This response is appropriate whenever ACM is found in a damaged, delaminated, or deteriorated condition over a relatively large area and poses a potential exposure hazard to building occupants. In addition to removing asbestos due to its condition or hazard potential, it shall also be removed before any construction, renovation, or demolition in structures containing friable asbestos or asbestos that will be made friable by these activities. In addition, no asbestos removal in excess of 160 square feet of surfacing material or 260 linear feet of pipe insulation or 35 cubic feet of any ACM will be performed without prior written notification to the Texas Department of State Health Services (TDSHS) (see Chapter 12.6).
  - 4. ***Emergency response*** – Cleanup and containment of a spill or release of known or suspected ACM that presents a potential hazard to building occupants. The APM (JE) is notified of any emergency involving significant damage to ACM resulting in the release of asbestos fibers. This type of situation is referred to as a fiber release episode. Upon notification, the APM coordinates response actions with the OHD and facilities maintenance COSS contractor. The situation will be evaluated and appropriate actions will be taken. These actions may include cleanup, repair, or removal of ACM as dictated by the particular circumstances.

## Part 12, Asbestos Control Requirements

- c. All personnel are instructed to call the site EOC numbers to report suspected asbestos debris. The EOC numbers are x33333 for JSC and Sonny Carter Training Facility, and x44444 at Ellington Field. The EOC will contact the JSC Environmental Spill Team for cleanup and containment and the OHD for hazard assessment and air monitoring.

### 8. Prohibited activities

To minimize the potential for exposure to asbestos, all ***uncontrolled*** activities that may damage ACM or PACM or cause the release of airborne asbestos fibers are prohibited. All personnel shall NEVER:

- a. Cut or drill holes in any ACM or PACM.
- b. Install hangers or fasteners in any ACM or PACM.
- c. Sand, grind, drill, remove, or damage any ACM or PACM including floor tiles, carpet tiles, or adhesives used on these tiles.
- d. Damage ACM or PACM while moving equipment or furniture.
- e. Install curtains, drapes, or dividers in such a manner that they will damage ACM or PACM.
- f. Use an ordinary vacuum or compressed air or dry sweeping to clean up ACM or PACM debris.
- g. Remove ceiling tiles below ACM or PACM without following the procedures set forth in Part 12.
- h. Hang any item from the suspended ceiling grid below a ceiling plenum with SAI.
- i. Damage any pipe or mechanical system insulation that contains or could contain ACM or PACM. Insulating materials such as Styrofoam, foam rubber, foam glass, or fiberglass do not contain asbestos; however, ACM may exist at the joints and fittings. Contact the APM before conducting activities that may cause disturbance or damage to these materials or follow the applicable procedure in Appendix 12B, Attachments 12A through 12G.